UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,446	06/14/2006	Ralph Kurt	T4957-B007	6762
22429 7590 09/19/2008 LOWE HAUPTMAN HAM & BERNER, LLP 1700 DIAGONAL ROAD SUITE 300 ALEXANDRIA, VA 22314			EXAMINER	
			WARD, JOHN A	
			ART UNIT	PAPER NUMBER
			2885	
			MAIL DATE	DELIVERY MODE
			09/19/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
Office Action Symmony	10/596,446	KURT, RALPH			
Office Action Summary	Examiner	Art Unit			
	John A. Ward	2885			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on					
	- <sup>.</sup> action is non-final.				
<i>i</i> —	/ <del></del>				
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
dissect in assertation with the practice and in E.	x parte Quayre, 1000 0.2. 11, 10	0.0.210.			
Disposition of Claims					
<ul> <li>4) ☐ Claim(s) 1-11 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☐ Claim(s) 1-11 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or election requirement.</li> </ul>					
Application Papers					
9)☐ The specification is objected to by the Examiner.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 042008.	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal Pa 6)  Other:	te			

Art Unit: 2885

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman et al (US 5,521,726 in view of Magno et al (US 6,538, 813).

Regarding claim 1, Zimmerman et al ('726) discloses a polarizer with an array of tapered waveguide having a light emitting picture element (abstract), a contrast enhance element 12, a plurality of waveguides 10 and an interstitial region between the waveguides 14.

Regarding claims 2 and 3, in figure the interstitial region 14 has a tapered shape.

Regarding claim 5, the interstitial region has a substantially funnel shape.

Regarding claims 6 and 7, the top angle of interstitial region has a top angle of less than 90 degrees.

Regarding claim 8, the thickness of the waveguide is between 10 and 100 microns.

Regarding claim 9, Zimmerman et al teaches that the cross section length of an exit surface of a wave guide is in the order of magnitude of a wavelength of light in the visible range (column 3, lines 27-37).

Regarding claim 10, the wave guides are in a random structure as shown in figure 1 of Zimmerman et al.

Regarding claim 11, the abstract of Zimmerman et al teaches that the wave guide can be used for a display device that displays text and graphics.

Regarding claims 1 and 4, Zimmerman et al discloses all the limitations of the claimed invention as cited above, but does not discloses an interface between the wave guide being a metal layer.

Regarding claims 1 and 4, Magno et al ("813) discloses a display screen with a metalized tapered waveguide having a tapered wave guide 12, with a interface between the waveguide 43 being that of metal.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the waveguide of Zimmerman et al with the metalized waveguide of Magno et al in order direct the light source toward the display as taught by Magno et al (abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Ward whose telephone number is 571-272-2386. The examiner can normally be reached on Monday - Friday.

Application/Control Number: 10/596,446 Page 4

Art Unit: 2885

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong (James) Lee can be reached on 571-272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAW September 14, 2008

/John A. Ward/ Primary Examiner, Art Unit 2885